



REMARKS

Claims 1-22 are currently pending and stand rejected. In particular, the following obviousness rejections are asserted in the Office Action:

(i) claims 1 and 15 stand rejected as being unpatentable over U.S. Patent No. 4,786,891 to Ueda in view of U.S. Patent No. 6,788,895 to Trezza;

(ii) claim 14 stands rejected as being unpatentable over U.S. Patent No. 4,762,391 to Margolin in view of U.S. Patent No. 5,262,635 to Curbelo

(iii) claims 2-10, 12-13 and 16-18 stand rejected as being unpatentable over Ueda in view of Trezza and Curbelo;

(iv) claim 11 stands rejected as being unpatentable over Ueda in view of Trezza and Curbelo as applied to claims 2 and 10 above and further in view of U.S. Patent No. 5,747,978 to Gariboldi.

With regard to claims 19-22, the Examiner's rejection is not based on cited art, but rather Examiner's opinion that such claims do "not present patentable subject matter."

Applicants respectfully traverse the above rejections and contend that Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness on all counts. The obviousness rejections are based on *impermissible hindsight reasoning* with the Examiner selectively choosing various elements from multiple references in an attempt to *reconstruct the claimed inventions without showing the proper motivation or suggestion for combining the references*.

On a fundamental level, the Examiner fails to appreciate an advantage of the claimed inventions to provide a “self aligned” photodetector, wherein an optical detector, which comprises an array of photosensors, is disposed to face the end of an optical fiber, whereby physical alignment of the optical fiber to a single given photo-sensor of the detector is not critical (as in conventional devices and methods). Instead automatic alignment is effectively provided electronically using a controller to detect actuated photo-sensors in the array to determine the relevant optical signal.

For instance, with respect to rejection (i) above for claims 1 and 15, it is clear that the combination of Ueda and Trezza clearly does not disclose or suggest ... *discounting any signal from photo-sensors that do not receive the optical signal, for automatically aligning the optical fiber to at least one of the photo-sensors.* To begin, the Examiner acknowledges, as he must, that Ueda does not teach these claimed features. This is rather apparent because although Ueda generally discloses an array of photosensors (in FIG. 12), the Ueda array is used for a completely different purpose than the claimed inventions. In Ueda, the array is used for determining shift positions or angle of rotation in relation to an absolute position for implementation with motors, which requires fundamentally distinct signal processing techniques. On this level, the Examiner’s reliance on Ueda appears to be irrelevant and wholly misplaced.

Moreover, Examiner’s reliance on Trezza to cure the deficiencies of Ueda is equally misplaced. Trezza discloses in FIG. 3B an array of detectors (14) and (22) that are connected to corresponding transmitters (emitters) (24) and (12), wherein each unique emitter/detector pair is connected by a signal fiber optic strand (see, Col. 7, lines 26-45). Trezza does not disclose or suggest that a detector (14) or (22) comprises an

array of photo-sensors which effectively enable alignment of a fiber optic strand to the detector, as essentially contemplated by the claimed inventions. In this regard, Trezza discloses nothing more than a process of mapping point to point connections between transceivers where one or more detectors can be mapped to an emitter when there is misalignment (see, Col. 7, lines 64-67 and Col. 8, lines 53-59).

Based on the above, it is clear that other than impermissible hindsight reconstruction of selected elements, the combination of Ueda and Trezza neither discloses or suggests various features of claims 1 and 15, and is thus legally deficient to establish a *prima facie* case of obviousness against claims 1 and 15.

Moreover, with respect to rejection (ii) above, the Examiner's purported motivation for combining the teachings of Margolin and Curbelo as against claim 14 is *belied* by the express teachings of the references, and amounts again to nothing more than hindsight reconstruction using various element selected from various references with utter lack of motivation or suggestion for combining the references. Indeed, without having to elaborate in detail, notwithstanding that Margolin generally discloses a photosensor array, Margolin teaches that the sensor array is aligned to a fiber bundle using *physical alignment* methods (See, e.g., Col. 8, lines 34-47). Indeed, Examiner acknowledges that Margolin does not teach the claimed controller having AC and DC extracting circuitry, etc. This is rather obvious in that Margolin is not even remotely related to methods for performing automatic electronic alignment of detectors. Thus, Examiner's reliance on Margolin as against the claimed inventions appears to be wholly misplaced and irrelevant.

Moreover, Examiner's reliance on Curbelo's purported general teaching of AC and DC extraction circuits is misplaced, because Examiner has *utterly failed* to demonstrate why it would have been obvious to modify the "controller" of Margolin to include AC and DC extraction circuits for each photosensor in the array of photosensors. Indeed, Examiner cites the control circuit (26) of FIG. 2 of Margolin. However, the control circuit (26) performs the function of controlling address generators (24) and (25) for controlling the readout of the signals in the array, which readout signals are processed by a utilization circuit (27). (See, e.g., Col. 3, lines 42-63).

Thus, on a fundamental level, the controller (26) of Margolin does **not** operate by *detecting which of the photo-sensors receives the optical signal, and deriving a received signal from any output of any of said photo-sensors that detects the optical signal*, as claimed in claim 14. In this regard, there is simply no logical or technical basis for Examiner's contention that the controller (26) would or could be modified to include the AC and DC circuitry, etc. as taught by Curbelo. In short, the combination of Margolin and Curbelo is legally deficient to establish a prima facie case of obviousness against claim 14.

With regard to rejections (iii) and (iv) above for claims 2-13 and 16-18, since these rejections are based, in part, on the combination of Ueda and Trezza as applied to base claims 1 and 15, these rejections are *fundamentally flawed* for at least the above reasons given for claims 1 and 15.

Moreover, with regard to the rejection of claims 19-22, since such rejections are based on Examiner's opinion rather than cited art, the Examiner is requested to provide an Affidavit as is required to attest to Examiner's personal knowledge as to the technical

basis that such claims do "not present patentable subject matter." Otherwise, Examiner must withdraw the rejection of such claims.

Accordingly, for at least the above reasons, withdrawal of the obviousness rejections is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Frank V. DeRosa", written over a horizontal line.

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